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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|------------------|----------------------|-------------------------|-----------------|
| 10/757,629 | 01/14/2004 | Mark James Kline | 8194C | 4664 |
| 27752 7 | 7590 10/31/2006 | | EXAM | INER |
| THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION | | | HILL, LAURA C | |
| | L BUSINESS CENTE | | ART UNIT | PAPER NUMBER |
| 6110 CENTER HILL AVENUE | | 3761 | | |
| CINCINNATI | TI, OH 45224 | | DATE MAILED: 10/31/2006 | 6 |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| it(s) | | |
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Office Action Summary

| Application No. | | Applicant(s) |
|-----------------|---------------|--------------|
| | 10/757,629 | KLINE ET AL. |
| | Examiner | Art Unit |
| | Laura C. Hill | 3761 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

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|---|----|----|----|--|
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| Any reply received by the Office later than three months after the mailing date of earned patent term adjustment. See 37 CFR 1.704(b). | of this communication, even if timely filed, may reduce any |
|--|---|
| Status | |
| 1) Responsive to communication(s) filed on 25 Augus | t 2006. |
| 2a) ☐ This action is FINAL . 2b) ☒ This action | |
| 3) Since this application is in condition for allowance e | |
| closed in accordance with the practice under Ex pa | • |
| Disposition of Claims | |
| 4)⊠ Claim(s) 1,4,5 and 8-19 is/are pending in the applic | ation. |
| 4a) Of the above claim(s) is/are withdrawn from | om consideration. |
| 5) Claim(s) is/are allowed. | |
| 6)⊠ Claim(s) <u>1,4,5 and 8-19</u> is/are rejected. | |
| 7) Claim(s) is/are objected to. | |
| 8) Claim(s) are subject to restriction and/or elec | ction requirement. |
| Application Papers | |
| 9) The specification is objected to by the Examiner. | |
| 10)⊠ The drawing(s) filed on 23 March 2005 and 14 Janu | ary 2004 is/are: a)⊠ accepted or b) objected to by the |
| Examiner. | ,, |
| Applicant may not request that any objection to the drawi | ng(s) be held in abeyance. See 37 CFR 1.85(a). |
| | required if the drawing(s) is objected to. See 37 CFR 1.121(d). |
| 11) The oath or declaration is objected to by the Examin | er. Note the attached Office Action or form PTO-152. |
| Priority under 35 U.S.C. § 119 | · |
| 12) Acknowledgment is made of a claim for foreign prior | ity under 35 U.S.C. § 119(a)-(d) or (f). |
| a) ☐ All b) ☐ Some * c) ☐ None of: | |
| 1. Certified copies of the priority documents hav | e been received. |
| 2. Certified copies of the priority documents hav | e been received in Application No. |
| • | ocuments have been received in this National Stage |
| application from the International Bureau (PC | - |
| * See the attached detailed Office action for a list of the | * ** |
| | |
| Attachment(s) | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal Patent Application 6) Other: |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 August 2006 has been entered.

Response to Arguments

Applicant's arguments filed 25 August 2006 have been fully considered but they are not persuasive.

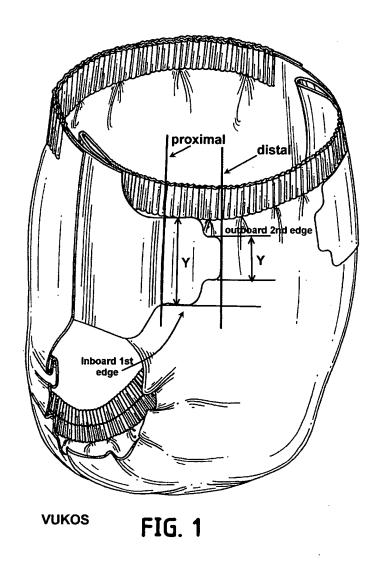
2. In response to Applicant's arguments that "the Vukos reference appears to illustrate an outside of a fastening ear, not a fastening element as recited in part in the Applicant's independent claims 1 and 17" (see Remarks page 2), Examiner maintains Vukos teaches a "fastening element" as discussed on pages 5-6 of the Office action dated 25 May 2006. Furthermore, since the Applicant has described the "fastening element" as a surface fastener such as a tape tab, hook and loop or a combination of these diverse and other elements (see instant Specification page 12, lines 22-27), the ear of Vukos is a fastening element as defined by Applicant since it connects and thus fastens the front panel to the back panel of the article to be placed on a user (see additionally figure 1).

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3. In response to Applicant's argument that Vukos does not teach or suggest an effective dimension Y as required by the independent claims (see Remarks pages 3-4), Examiner maintains that Vukos discloses the fastening element/ear has an effective dimension Y extending in the longitudinal direction that increases from the distal/center edge to the proximal edge (see annotated Figure 1 below). Furthermore, it is noted that Vukos is not relied upon for a teaching of a particular dimension as alleged by Applicant, but rather is relied upon for disclosing the general recitation by Applicant of having an "effective dimension Y increasing from a distal edge of the first fastening element to a proximal edge of the first fastening element" as shown below. There is no positive recitation in the claims that requires the Y dimension to be a particular measured size so long as it is relatively increasing in the longitudinal Y dimension.

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Drawings

4. All previous objections to the drawings submitted 14 January 2004 and 23 March 2005 have been removed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 1, 4-5, 8-10 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (US 3,797,495 herein 'Schmidt') in view of Vukos et al. (US Des. 422,078 herein 'Vukos'), and further in view of Tritsch (US 3,937,221; herein 'Tritsch'. Regarding claims 1, 4, 8-9, 11, and 16-19 Schmidt discloses a diaper 20 with absorbent pad/chassis 22 to be worn about a wearer (column 6, lines 39-43 and figure 2) comprising: a surface fastening system 28 with first tape base/fastening element 12 and protective cover strip/second facing fastening element 30, the surface fastening system 28 including an effective Y dimension substantially parallel to the longitudinal article axis (column 6, lines 63-68, figure 3), wherein the backing tape used in surface fastening system 28 is able to withstand different tear and tensile forces applied across the tape in varying directions and degrees when user moves (column 2, lines 1-11). Schmidt does not expressly disclose the fastening system itself is resistant to different levels of resistance in different directions or a Y dimension increasing from a distal to proximal edge of the first fastening system. Vukos discloses disposable absorbent article to be worn about a user with a Y dimension increasing from a distal to proximal

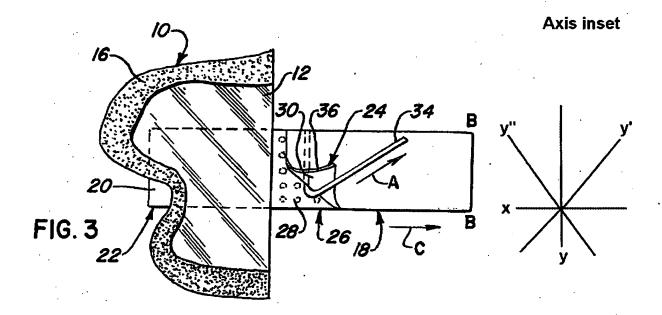
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edge having a first longitudinally inboard edge longer than a second longitudinally outboard edge and an overall tab fastener curvilinear configuration capable of being gripped more easily by a caregiver or user (see annotated figure 1 above). One would be motivated to modify the fastening system of Schmidt with the increasing Y-dimension and curvilinear edges of Vukos since doing so would provide an easier mechanism to grip and open the tab and since both references disclose wearing articles with fastening systems for fastening about the waist of a user. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the fastening system, thus providing a fastening system with an increasing Y-dimension from the distal to proximal edge.

Schmidt/Vukos *do not expressly disclose* the fastening system has different levels of resistance in different directions from the engaged to disengaged configuration. **Tritsch** discloses diaper 10 with tab 18 having separator string 34, where separation is effected by grasping the protruding portion of string 34 and peeling end portion 24 away from central portion from central portion 26 in the diagonal direction of arrow A (i.e.: in a plane non-parallel to the xz-plane/first peel load), thereby lifting up one corner of the folded-over end portion 24 (column 3, line 8, column 4, lines 38-40, column 5, lines 1-6 and figure 3). Tritsch further discloses the user is then able to grasp free end 24 of tab 18 near end border 36 and pull in a direction indicated by arrow C (in a plane parallel to the xz-plane/second peel load). Since the user must pull in a plane non-parallel to the xz-plane/first peel load first as indicated by arrow A to be able to subsequently pull in a plane parallel to the xz-plane/second peel load as indicated by arrow C, the first

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diagonal and curvilinear peel load required to start the tab lifting action is greater than the second parallel peel load.



One would be motivated to modify the curvilinear pressure sensitive adhesive fastener of Schmidt/Vukos with the pressure sensitive adhesive mulit-directional resistance to force in different direction fastener of Trisch for improved fastener stability in relation to the article during forces generated by the wearer during use since the references are in the same field of endeavor; disposable absorbent wearing articles having pressure-sensitive adhesive fastening means around a wearer's waist. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the fasteners, thus providing a fastener with resistance to peel force in different directions.

Alternatively, the peak peel load value from the y'z plane through the y"z plane will inherently be greater than the second peak peel load value in the xz plane since it

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takes more force and inertia to begin disengagement of the fastener by pulling in a non-linear diagonal and sideways motion such as from the y'z through the y"z planes than it does to pull entirely in an upward and "out-of the page" xz plane direction in a shear mode fashion after pulling has begun on the fastener (see also Applicant's own admission to this point on page 14, lines 4-6 of the instant Specification).

Regarding claim 5 Schmidt/Vukos further disclose protective cover strip/second facing fastening element 30 having a portion of the lower edge being unjoined or at least partially detached from the underlying structure (figure 3).

Regarding claim 10 Vukos further discloses the disposable absorbent article with first and second fastening elements attached to form a waist opening and a pair of leg openings (figures 1 and 4).

Regarding claims 12-15 Schmidt/Vukos/Tritsch do not expressly disclose peak peel load or plane projection angle values. Peak peel load and plane projection angles are result effective variables because it is well known to those of ordinary skill in the art that they are at a result of the size of the fastening system and article and inherently dependent on the user's force applied from engagement to the disengagement period that will vary amongst users. Furthermore, by Applicant's own admission, peak peel load is a result effective variable since it is dependent on the angle alpha exerted during peeling (see page 15, lines 9-16 of the instant Specification). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Schmidt/Vukos/Tritsch with peak peel load and plane projection angles since it has been held that discovering an optimum value of a result effective variable involves only

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routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (hours vary).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura C. Hill Examiner Art Unit 3761

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PRIMARY EXAMINER